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NAS SOUTH WEYMOUTH
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LETTER REPORT RADIOLOGICAL INVESTIGATION OF RIA (RADIOLOGICAL INVESTIGATION AREA) 99 AT THE FORMER NAS SOUTH WEYMOUTH

8/11/2003

U S NAVY RADIOLOGICAL AFFAIRS SUPPORT OFFICE

DEPARTMENT OF THE NAVY
NAVAL SEA SYSTEMS COMMAND DETACHMENT
RADIOLOGICAL AFFAIRS SUPPORT OFFICE (RASO)
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From: Officer in Charge, Naval Sea Systems Command Detachment, Radiological Affairs Support Office (RASO)

To: Commanding Officer, Engineering Field Activity, Northeast, Philadelphia, PA (ATTN: Mr. M. Leipert)

Subj: RADIOLOGICAL INVESTIGATION OF THE FORMER NAVAL AIR STATION (NAS), SOUTH WEYMOUTH, MA

Ref: (a) PHONCON ENGFLDACT NORTHEAST Mr. M. Leipert/NAVSEADET RASO Mr. R. W. Lowman of 16 May 03

Encl: (1) Radiological Investigation Of The Former Naval Air Station, South Weymouth, MA

1. As requested during reference (a), enclosure (1) is forwarded for your records. As stated in enclosure (1), the investigation indicates no potential for radioactive contamination.

2. NAVSEADET RASO point of contact is Mr. Lary R. Martin at commercial (757) 887-4692, DSN 953-4692 or FAX (commercial only) (757) 887-3235.

L. L. FRAGOSO

RADIOLOGICAL INVESTIGATION OF THE FORMER NAVAL AIR STATION (NAS) SOUTH WEYMOUTH, MA

1. On 23 November 1998, Steve Hurff of Engineering Field Activity, Northeastern Division, requested NAVSEADET RASO assist in releasing nine 55-gallon drums of waste for disposal. On 2 December 1998, Mr. Lary Martin of the NAVSEADET RASO staff arrived at NAS South Weymouth to accomplish this task and to review other potential uses of radioactive material at the base.

2. Hangar 1. The nine drums contained concrete rubble and wet sludge from cleaning a floor drain system in Hanger 1. The drain system consisted of four 12 x 12 x 12 inch troughs that drain water from the floor through the oil water separator to the sanitary drainage system. The disposal facility would not accept the drums without certification that they did not contain radioactive material.

a. An assessment of the drums was performed on 2 December 1998. Background readings, using an Eberline E-600 and SPA-3 probe, were taken approximately twenty feet from the drums. The probe was held approximately one meter above the floor and the readings ranged from 5000 to 7000 counts per minute (cpm). Seven of the drums had only background levels with two drums having maximum readings of 7200 cpm on contact. The two other drums had small hotspots with readings up to 11,500 cpm. These drums were opened for a more detailed inspection. The drums contained dirt and sludge from the floor drains. They also contained small chunks of concrete that had been scraped from the drain troughs. The concrete chunks had readings as high as 13,500 cpm. The dirt and sludge around the chunks showed background readings.

b. The concrete chunks were darker in color and had a smoother texture than the concrete floors, but did match concrete patches in the floors and troughs. The original concrete had readings in the 6000 - 8000 cpm range, while the patched areas had readings in the 11,000 to 13,000 cpm range. The higher readings on the chunks are due to higher concentrations of naturally occurring thorium and uranium in the concrete and do not indicate the presence of any radioactive contamination.

3. Civil Defense/Disaster Preparedness Trailer. A semi-trailer had been found in a storage lot on NAS, South Weymouth. When the trailer was opened a box with radiation markings was found inside. NAVSEADET RASO personnel inspected the trailer to determine if a radiological hazard existed. The inspection revealed the trailer contained old civil defense/disaster preparedness equipment such as gas masks and radiation detection instruments. Some of the radiation detection instruments contained radioactive check sources. ENGFLDACT NORTHEAST was directed to separate the material and provide an inventory of the source bearing instruments to NAVSEADET RASO, who would then arrange for disposal of the radioactive material. In the meantime, NAVSEADET RASO contacted the Navy RADIAC Program Office requesting assistance in having all devices with radioactive check sources removed and returned to control of the Navy RADIAC Program. On 14 June 2001, personnel from the Navy RADIAC Calibration Laboratory at Naval Weapons Station, Yorktown, Virginia arrived on site and packaged the RADIACs containing radioactive check sources for shipment. The equipment was received at the Navy RADIAC Calibration Laboratory, Yorktown, VA on 18 June 2001. All other civil defense equipment that did not contain radioactive sources was transported back to the Navy RADIAC Calibration Laboratory, Yorktown by the on site personnel.

4. Pistol Range. ENGFLDACT NORTHEAST had received information that a radiation sign, located on a fence surrounding the Marine electrical compound, may have been placed at the top of the pistol range backstop hill. The time period could not be determined. NAVSEADET RASO performed a scoping survey of the hilltop to determine if there was any indication of radioactive material. Background levels were detected. Historical records could not confirm a reason for the sign to have been placed there, although it may have referred to electronic equipment used in the compound. NAVSEADET RASO determined that no further radiological investigation was warranted on the pistol range.

5. Records Research. NAVSEADET RASO and ENGFLDACT NORTHEAST reviewed historical records for NAS, South Weymouth. NAS, South Weymouth never held a Nuclear Regulatory Commission (NRC) license or a Naval Radioactive Materials Permit (NRMP) for possession or use of radioactive material. The only radioactive material expected at NAS South Weymouth would have been license exempt, or generally licensed consumer products such as watches, compasses, gauges, or smoke detectors. There are no records of disposal of these items in the landfills on NAS, South Weymouth.

6. Conclusion. No further radiological investigations at NAS South Weymouth are deemed necessary.